

04-16-01

A

04/13/01  
1017 U.S. PTO  
09/834505  
04/13/01

Attorney's Docket No. 4424/4526

PATENTPATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application  
Assistant Commissioner for Patents  
Washington, DC 20231

**NEW APPLICATION TRANSMITTAL**

Transmitted herewith for filing is the patent application of Inventor(s):

Shau-Lin Frank Chen

For (Title):

**LAYERED SO<sub>x</sub> TOLERANT NO<sub>x</sub> TRAP CATALYSTS AND  
METHODS OF MAKING AND USING THE SAME**

**1. Type of Application**

This new application is for a(n)

- ☒ Original (nonprovisional)
- ☐ Design
- ☐ Divisional
- ☐ Continuation
- ☐ Continuation-in-part (CIP)

**2. Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)**

- ☐ The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

**Certification under 37 CFR 1.10**

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date 13 April 01 in an envelope as "Express Mail Post Office to Addressee", Mailing Label Number EP331655749US, addressed to the: Assistant Commissioner for Patents, Washington, DC 20231.

Richard R. Muccino

(type or print name of person mailing paper)

Richard R. Muccino

Signature of person mailing paper

3. Papers enclosed which are required for filing date under 37 CFR 1.53(b),  
(Regular) or 37 CFR 1.153 (Design) Application.

70 Pages of specification

22 Pages of claims

1 Pages of abstract

2 Sheets of drawing

- ☒ Formal  
☐ Informal

- ☐ The enclosed drawing(s) are photograph(s), and there is also attached a  
"PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)". 37 CFR 1.84(b).

4. Additional papers enclosed:

- ☐ Preliminary Amendment  
☐ Information Disclosure Statement (37 CFR 1.98)  
☐ Form PTO-1449  
☐ Citations  
☐ Other

5. Declaration or oath

☒ Enclosed

☐ Executed by  
(check all applicable boxes)

☒ Unexecuted

☐ inventor(s).

☐ legal representative of inventor(s).  
37 CFR 1.42 or 1.43.

☐ joint inventor or person showing a proprietary interest on behalf of  
inventor who refused to sign or cannot be reached.

☐ This is the petition required by 37 CFR 1.47 and the statement  
required by 37 CFR 1.47 is also attached. See item 13 below for fee.

☐ Not enclosed.

6. Inventorship Statement

The inventorship for all the claims in this application are:

☒ The same.

or

- ☐ Not the Same. An explanation, including the ownership  
of the various claims at the time the last claimed invention was made,  
☐ is submitted.  
☐ will be submitted.

## 7. Language

- ☒ English  
☐ Non-English  
☐ The attached translation includes a statement that the translation is accurate. 37 CFR 1.52(d).

## 8. Assignment

- ☐ an assignment of the invention to ENGELHARD CORPORATION  
☐ is attached. A Separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO 1595 is also attached.  
☒ will follow.

NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).

**WARNING:** A newly executed "CERTIFICATE UNDER 37 CFR 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.

## 9. Certified Copy

Certified Copy(ies) of application(s)

Country	Appln. No.	Filed
Country	Appln. No.	Filed
Country	Appln. No.	Filed

from which priority is claimed

- ☐ is (are) attached.  
☐ will follow.

NOTE: The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 CFR 1.55(a) and 1.63.

NOTE: This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. 120 is itself entitled to priority from a prior foreign application, then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

# 10. Fee Calculation (37 CFR 1.16)

A. ☒ Regular application

## CLAIMS AS FILED

Number filed		Number Extra		Rate	Basic Fee 37 CFR 1.16(a) \$710.00
Total Claims (37 CFR 1.16(c)) 118	-20 =	98	X	\$18.00	\$1764.000
Independent Claims (37 CFR 1.16(b)) 8	- 3 =	5	X	\$80.00	\$400.00
Multiple Dependent Claim(s), if any (37 CFR 1.16(d))				\$270.00	0

- ☐ Amendment cancelling extra claims is enclosed.  
☐ Amendment deleting multiple-dependencies is enclosed.  
☐ Fee for extra claims is not being paid at this time.

NOTE: If the fees for extra claims are not paid on filing, they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency. 37 CFR 1.16(d).

Filing Fee Calculation

\$2874.00

B. ☐ Design application  
(\$330.00 – 37 CFR 1.16(f))

Filing Fee Calculation

\$ \_\_\_\_\_

# 11. Small Entity Statement(s)

- ☐ Statement(s) that this is a filing by a small entity under 37 CFR 1.9 and 1.27 is (are) attached.

*(complete the following, if applicable)*

- ☐ Status as a small entity was claimed in prior application  
\_\_\_\_\_/\_\_\_\_\_, filed on \_\_\_\_\_, from which benefit  
is being claimed for this application under:

35 U.S.C. ☐ 119(e),  
☐ 120,  
☐ 121,  
☐ 365(c),

and which status as a small entity is still proper and desired.

- ☐ A copy of the statement in the prior application is included.  
Filing Fee Calculation (50% of A, B or C above)

\$ \_\_\_\_\_

**12. Request for International-Type Search (37 CFR 1.104(d))**

*(complete, if applicable)*

- ☐ Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

**13. Fee Payment Being Made at This Time**

- ☐ Not Enclosed

- ☐ No filing fee is to be paid at this time.  
*(This and the surcharge required by 37 CFR 1.16(e) can be paid subsequently).*

- ☒ Enclosed

- |   |                  |
|---|------------------|
| <input checked="" type="checkbox"/> Basic filing fee  | <u>\$2874.00</u> |
| <input type="checkbox"/> Recording assignment<br>(\$40.00; 37 CFR 1.21(h)) (See attached "COVER SHEET<br>FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION")  | \$ _____         |
| <input type="checkbox"/> Petition fee for filing by other than all the inventors or person on<br>behalf of the inventor where inventor refused to sign or cannot be<br>reached. (\$130.00; 37 CFR 1.47 and 1.17(h)) | \$ _____         |
| <input type="checkbox"/> For processing an application with a specification in a<br>non-English language (\$130.00; 37 CFR 1.52(d) and 1.17(k))   | \$ _____         |
| <input type="checkbox"/> Processing and retention fee<br>(\$130.00; 37 CFR 1.53(d) and 1.21(l))   | \$ _____         |
| <input type="checkbox"/> Fee for international-type search report<br>(\$40.00; 37 CFR 1.21(e))  | \$ _____         |

Total fees enclosed \$2874.00

**14. Method of Payment of Fees**

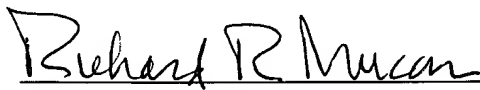
- ☒ Credit Card Payment Form in the amount of \$2874.00.

Commissioner is hereby authorized to charge any additional fees required by this paper and during the entire pendency of this application to Account No. 05-1070.  
Credit any overpayment to Account No. 05-1070.

Date: \_\_\_\_\_

Reg. No. 32,538

Tel. No. (908) 273-4988

  
Signature of Attorney

Richard R. Muccino  
*(type or print name of attorney)*

SEND CORRESPONDENCE TO:

Chief Patent Counsel  
Engelhard Corporation  
101 Wood Avenue  
P.O. Box 770  
Iselin, New Jersey 08830-0770

DIRECT TELEPHONE CALLS TO:

Mr. Richard A. Negin  
732/205-6241